

**AMENDMENTS TO THE CLAIMS**

1. **(Currently Amended)** Use of A process for the preparation of solid polyester granules by suspension polymerization, the process comprising a combination of diacyl peroxides with an aromatic amine of formula (I):



(I)

where  $\text{R}^1$  is an optionally substituted  $\text{C}_1\text{-C}_{20}$  alkyl group, or  $-(\text{CHR}'\text{CHR}'\text{-O})_n\text{H}$ , where  $n$  is 1 to 10 and each  $\text{R}'$  is independently selected from H and  $\text{C}_1\text{-C}_3$  alkyl;

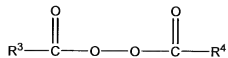
$\text{R}^2$  is an optionally substituted  $\text{C}_1\text{-C}_{20}$  alkyl group, or  $-(\text{CHR}'\text{CHR}'\text{-O})_n\text{H}$ , where  $n$  is 1 to 10 and each  $\text{R}'$  is independently selected from H and  $\text{C}_1\text{-C}_3$  alkyl; and

Ar is an optionally substituted aryl group,

as a redox initiating system ~~in a process for the manufacture of solid polyester granules by suspension polymerisation~~, wherein the combination of diacyl peroxides comprises diaroyl peroxide and dialkanoyl peroxide having a diaroyl peroxide to dialkanoyl peroxide mole ratio that is equal to or greater than 1:1.

2. **(Currently Amended)** The ~~use~~ process according to claim 1, wherein one or both of  $\text{R}^1$  and  $\text{R}^2$  are hydroxyethyl groups.

3. **(Currently Amended)** The ~~use~~ process according to claim 1 or 2, wherein the diaroyl peroxide is selected from compounds of formula (II):



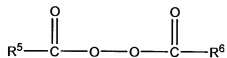
(II)

where R<sup>3</sup> and R<sup>4</sup> are independently selected from optionally substituted aryl.

4. (Cancelled)

5. (Currently Amended) The use process according to ~~any one of claims 1 to 4~~ claim 1, wherein the diaryl peroxide is selected from dibenzoyl peroxide and 2,4-dichlorobenzoyl peroxide.

6. (Currently Amended) The use process according to ~~any one of claims 1 to 5~~ claim 1, wherein the dialkanoyl peroxide is selected from compounds of formula (III):



(III)

where R<sup>5</sup> and R<sup>6</sup> are independently selected from optionally substituted alkyl.

7. (Cancelled)

8. **(Currently Amended)** The ~~use~~ process according to ~~any one of claims 1 to 7~~ claim 1, wherein the dialkanoyl peroxide is selected from dilauroyl peroxide, diacetyl peroxide, disuccinyl peroxide, di(3,5,5-trimethylhexanoyl) peroxide, and didecanoyl peroxide.

9. **(Currently Amended)** The ~~use~~ process according to ~~any one of claims 1 to 8~~ claim 1, wherein the mole ratio of the diaroyl peroxide to the dialkanoyl peroxide ranges from 1:1 to 10:1.

10-11. **(Cancelled)**

12. **(Currently Amended)** The ~~use~~ process according to ~~any one of claims 1 to 11~~ claim 1, wherein the mole ratio of the aromatic amine to the total number of moles of the diaroyl and dialkanoyl peroxides ranges from 1:2 to 1:8.

13-14. **(Cancelled)**

15. **(Currently Amended)** The ~~use~~ process according to ~~any one of claim 1 to 14~~ claim 1, wherein the aromatic amine is selected from N-ethyl-N-hydroxyethyl aniline, N,N-bis hydroxyethyl aniline, N-ethyl-N-hydroxyethyl-p-toluidine and N,N-bis 2-hydroxyethyl-p-toluidine.

16. (Original) A process for the preparation of solid polyester granules comprising:

- (i) preparing a solution of unsaturated polyester and a combination of diacyl peroxides in styrene, wherein the combination of diacyl peroxides comprises diaroyl peroxide and dialkanoyl peroxide having a diaroyl peroxide to dialkanoyl peroxide mole ratio that is equal to or greater than 1:1,
- (ii) emulsifying said solution in water to provide a stabilised oil-in-water emulsion,
- (iii) adding to said emulsion an aromatic amine of formula (I):



(I)

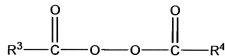
where  $\text{R}^1$  is an optionally substituted  $\text{C}_1\text{-C}_{20}$  alkyl group, or  $-(\text{CHR}'\text{CHR}'\text{-O})_n\text{H}$ , where  $n$  is 1 to 10 and each  $\text{R}'$  is independently selected from H and  $\text{C}_1\text{-C}_3$  alkyl;

$\text{R}^2$  is an optionally substituted  $\text{C}_1\text{-C}_{20}$  alkyl group, or  $-(\text{CHR}'\text{CHR}'\text{-O})_n\text{H}$ , where  $n$  is 1 to 10 and each  $\text{R}'$  is independently selected from H and  $\text{C}_1\text{-C}_3$  alkyl; and

Ar is an optionally substituted aryl group,  
such that reaction of said aromatic amine of formula (I) with each of the diaroyl and dialkanoyl peroxides generates a radical flux capable of initiating polymerisation of the unsaturated polyester and the styrene.

17. (Original) The process according to claim 16, wherein one or both of  $\text{R}^1$  and  $\text{R}^2$  are hydroxy ethyl groups.

18. (Currently Amended) The process according to claim 16 or 17, wherein the diaroyl peroxide is selected ~~from~~ from compounds of formula (II):



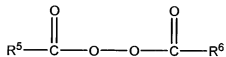
(II)

where R<sup>3</sup> and R<sup>4</sup> are independently selected from optionally substituted aryl.

19. (Cancelled)

20. (Currently Amended) The process according to ~~any one of claims 16 to 19~~ claim 16, wherein the diaroyl peroxide is selected from dibenzoyl peroxide and 2,4-dichlorobenzoyl peroxide.

21. (Currently Amended) The process according to ~~any one of claims 16 to 20~~ claim 16, wherein the dialkanoyl peroxide is selected from compounds of formula (III):



(III)

where R<sup>5</sup> and R<sup>6</sup> are independently selected from optionally substituted alkyl.

22. (Cancelled)

23. **(Currently Amended)** The process according to ~~any one of claims 16 to 22~~ claim 16, wherein the dialkanoyl peroxide is selected from dilauroyl peroxide, diacetyl peroxide, disuccinyl peroxide, di(3,5,5-trimethylhexanoyl) peroxide, and didecanoyl peroxide.

24. **(Currently Amended)** The process according to ~~any one of claims 16 to 23~~ claim 16, wherein the mole ratio of the diaroyl peroxide to the dialkanoyl peroxide ranges from 1:1 to 10:1.

25-26. **(Cancelled)**

27. **(Currently Amended)** The process according to ~~any one of claims 16 to 26~~ claim 16, wherein the mole ratio of the aromatic amine to the total number of moles of the diaroyl and dialkanoyl peroxides ranges from 1:2 to 1:8.

28-29. **(Cancelled)**

30. **(Currently Amended)** The process according to ~~any one of claims 16 to 29~~ claim 16, wherein the aromatic amine is selected from N-ethyl-N-hydroxyethyl aniline, N,N-bis hydroxyethyl aniline, N-ethyl-N-hydroxyethyl-p-toluidine and N,N-bis (2-hydroxyethyl)-p-toluidine.

31. **(Currently Amended)** The process according to ~~any one of claims 16 to 30~~ claim 16, wherein the resultant polyester granule slurry prepared by the process has a residual free styrene level of less than 1000 ppm.

32-33. **(Cancelled)**

34. **(Currently Amended)** The process according to ~~any one of claims 16 to 33~~ claim 16, wherein the unsaturated polyester is a terpolymer of maleic anhydride, phthalic anhydride and propylene glycol.

35. **(Currently Amended)** The process according to ~~any one of claims 16 to 34~~ claim 16, wherein the solid polyester granules have an average diameter of up to 500 µm.

36. **(Currently Amended)** The process according to ~~any one of claims 16 to 35~~ claim 16, wherein the aromatic amine is added to the emulsion as a spray or as a series of thin streams.

37. **(Original)** A process for the preparation of solid polyester granules comprising:

- (i) preparing a solution of unsaturated polyester, and first diacyl and second diacyl peroxide in styrene, wherein the mole ratio of the first peroxide to the second peroxide is equal to or greater than 1:1,
- (ii) emulsifying said solution in water to provide a stabilised oil-in-water emulsion,
- (iii) adding to said emulsion an aromatic amine of formula (I):



(I)

where R<sup>1</sup> is an optionally substituted C<sub>1</sub>-C<sub>20</sub> alkyl group, or -(CHR'CHR'-O)<sub>n</sub>H where n is 1 to 10 and each R' is independently selected from H and C<sub>1</sub>-C<sub>3</sub> alkyl;

R<sup>2</sup> is an optionally substituted C<sub>1</sub>-C<sub>20</sub> alkyl group, or -(CHR'CHR'-O)<sub>n</sub>H where n is 1 to 10 and each R' is independently selected from H or C<sub>1</sub>-C<sub>3</sub> alkyl; and

Ar is an optionally substituted aryl group,

such that reaction of the aromatic amine of formula (I) with each of the first and second diacyl peroxides generates a radical flux capable of initiating polymerisation of the unsaturated polyester and the styrene, and wherein at the commencement of the polymerisation the radical flux generated by the first peroxide is greater than any radical flux generated by the second peroxide.

### 38. (Cancelled)

39. (Currently Amended) A water-based decorative paint composition comprising binder and polyester granules prepared in accordance with the process of claims 1, 16 or 37 ~~any one of claim 16 to 37, wherein the paint is formulated so that the granules protrude from the surface of an applied paint film.~~

40. (Currently Amended) [[A]] The water-based decorative paint composition according to claim 39 ~~comprising binder and pigmented polyester granules, wherein the~~



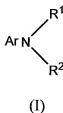
pigmented polyester granules comprise two or more differently coloured pigmented polyester granules, and wherein the paint is formulated so that the granules protrude from the surface of an applied paint film.

41. **(Currently Amended)** The water-based decorative paint composition according to claim 40, wherein the two or more differently coloured pigmented polyester granules attain their different colours through incorporation of different pigment materials.

42. **(Cancelled)**

43. **(Currently Amended)** A water-based decorative paint film comprising pigmented polyester granules prepared in accordance with the process of claims 1, 16 or 37, wherein the pigmented polyester granules comprise two or more differently coloured pigmented polyester granules, and wherein the granules protrude from the surface of the paint film.

44. **(New)** A redox initiating system for use in the manufacture of solid polyester granules by suspension polymerization, the system comprising a combination of diacyl peroxides with an aromatic amine of formula (I):



where  $\text{R}^1$  is an optionally substituted  $\text{C}_1\text{-C}_{20}$  alkyl group, or  $-(\text{CHR}'\text{CHR}'\text{-O})_n\text{H}$ , where  $n$  is 1 to 10 and each  $\text{R}'$  is independently selected from H and  $\text{C}_1\text{-C}_3$  alkyl;

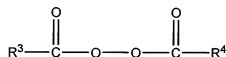
$R^2$  is an optionally substituted  $C_1$ - $C_{20}$  alkyl group, or  $-(CHR'CHR^1-O)_nH$ , where  $n$  is 1 to 10 and each  $R'$  is independently selected from H and  $C_1$ - $C_3$  alkyl; and

Ar is an optionally substituted aryl group,

wherein the combination of diacyl peroxides comprises diaroyl peroxide and dialkanoyl peroxide having a diaroyl peroxide to dialkanoyl peroxide mole ratio that is equal to or greater than 1:1.

45. **(New)** The redox initiating system according to claim 44, wherein one or both of  $R^1$  and  $R^2$  are hydroxyethyl groups.

46. **(New)** The redox initiating system according to claim 44, wherein the diaroyl peroxide is selected from compounds of formula (II):

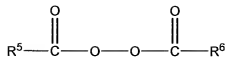


(II)

where  $R^3$  and  $R^4$  are independently selected from optionally substituted aryl.

47. **(New)** The redox initiating system according to claim 44, wherein the diaroyl peroxide is selected from dibenzoyl peroxide and 2,4-dichlorobenzoyl peroxide.

48. **(New)** The redox initiating system according to claim 44, wherein the dialkanoyl peroxide is selected from compounds of formula (III):



(III)

where  $\text{R}^5$  and  $\text{R}^6$  are independently selected from optionally substituted alkyl.

49. **(New)** The redox initiating system according to claim 44, wherein the dialkanoyl peroxide is selected from dilauroyl peroxide, diacetyl peroxide, disuccinyl peroxide, di(3,5,5-trimethylhexanoyl) peroxide, and didecanoyl peroxide.

50. **(New)** The redox initiating system according to claim 44, wherein the mole ratio of the diaroyl peroxide to the dialkanoyl peroxide ranges from 1:1 to 10:1.

51. **(New)** The redox initiating system according to claim 44, wherein the mole ratio of the aromatic amine to the total number of moles of the diaroyl and dialkanoyl peroxide ranges from 1:2 to 1:8.

52. **(New)** The redox initiating system according to claim 44, wherein the aromatic amine is selected from N-ethyl-N-hydroxyethyl aniline, N,N-bis hydroxyethyl aniline, N-ethyl-N-hydroxyethyl-p-toluidine and N,N-bis 2-hydroxyethyl-p-toluidine.